

# focus on *Fish & Wildlife*

## *Hoosier ringneck pheasant adventures*



The Division of Fish and Wildlife offers reserved pheasant hunting in northwestern Indiana. Application cards for the hunts are in the *Hunting and Trapping Guide*, available wherever hunting and fishing licences are sold. The reserved pheasant hunt registration deadline is Oct. 1.

I shot out of bed propelled by pheasant hunting anticipation. I had been chosen to hunt on a Division of Fish and Wildlife gamebird habitat area in northwestern Indiana. Rumor had it that these areas provide a pheasant hunting experience that most Hoosier bird hunters only dream about, with wild pheasant hunting comparable to the best of the western states.

As the sun peaked over the cold, snowy December horizon, my uncle, dad and I loaded up our Brittany and headed toward Boswell, Ind. to pursue the beautiful and cunning ringneck pheasant.

I hoped to have the best pheasant hunt of my life with the two people who started me pheasant hunting. I spent 16 hunting seasons since running through briar patches, picking cockle burrs off dogs, playing bird dog, falling in creeks, and missing shots at hard flying, loud cackling cock pheasants.

The Brittany bounced with excitement as we pulled into the game bird area and saw pheasants flying to cornfields to feed. As we let the dog out, we knew the key to making this a successful hunt was patience and a close working dog. By December, all the dumb birds are gone.

Within 50 yards of walking, a cock pheasant shot up, just out of range, with sunlight glinting brightly off the iridescent feathers. Hen pheasants flushed all around us. Our strategy was to keep the birds away from neighboring land, which is harder than it sounds.

We spent almost all day on the 60-acre game bird habitat area — stopping only to take a lunch break at the local restaurant where pheasant hunting stories were served with the sausage and gravy. We took one bird that day, but saw quite a few long tail feathers. Wild cock pheasants quickly learn to run and not fly when shot at.

The trip home flowed with hunting memories from the day and yesteryear. This trip seemed to me a passing of the torch. The two people who got me started with upland game hunting and outdoor adventures, and steered me toward a career in wildlife management, would soon be hanging up the old shotguns for good. The realization that the years of hunting together are winding down is rough, tougher even than finding good bird hunting partners.

James Kershaw, operational planner, Division of Fish and Wildlife

## *Topics this issue...*

*Taking kids waterfowl hunting*

*Amanda's first deer*

*Exotic aquatics in our waters*

*Fish genetics*

# Director of *Fish & Wildlife*

## *Some CARA money coming!*



Over the past few months I've been telling you about the Conservation and Reinvestment Act (CARA). CARA money would have provided a much needed financial boost to help our Hoosier wildlife. Unfortunately, CARA did not pass the U.S. Congress last year. But attached to the Commerce, Justice and State appropriations bill, the Wildlife Conservation and Restoration Program (WCRP) did pass. \$50 million to fund wildlife restoration and public stewardship education was set aside. Indiana is eligible for \$851,000 of these federal funds. The state match for these funds will come from

donated tax check-off money. These donated nongame funds are more important than ever for Indiana wildlife since they now can be matched by this federal money.

WCRP funds must be committed for use in the next three years and the following are potential projects being considered in three funded areas: conservation, education and recreation.

There are two osprey nests in Indiana. However, they have been very slow in re-colonizing and we could assist with a restoration project. Restoration efforts in the natural lakes region and our fish and wildlife areas with large lakes or impoundments are likely restoration sites.

The Indiana bat has not responded to efforts aimed at protection of their winter hibernacula. Research is needed to determine the mechanism of their continued decline.

Spotted turtles and Blanding's turtles are state endangered species that continue to decline even in areas of suitable habitat. Intervention may be required to bring populations back up.

The Eastern flock of the sandhill cranes that build up to such a spectacular sight at Jasper-Pulaski Fish and Wildlife Area during fall migration, nests in the upper great lakes region and winters in Florida. A high-quality video depicting the natural history of the cranes can be edited for educational use in a variety of ways.

The Pisgah Lake nongame area in Kosciusko County was purchased by the nongame program 15 years ago. The construction of a handicapped accessible viewing deck will increase the ability of visitors to use this unique area to view waterfowl and other wildlife while protecting the sensitive nature of the area.

The coalition for Teaming With Wildlife wants to ensure that many more projects like these can be accomplished in Indiana. Member groups are pushing hard for Congress to pass this year's CARA, HR 701. The bill, with permanent funding, was reintroduced and has more than 150 co-sponsors in the House of Representatives. Indiana Representatives Mark Souder, Julia Carson and Tim Roemer co-sponsor HR 701.

Gary Doxtater

## **Mission**

To manage fish and wildlife for present and future generations, balancing ecological, recreational and economic benefits.



*Focus on Fish & Wildlife* is a quarterly publication from the Indiana Department of Natural Resources Division of Fish and Wildlife. *Focus on Fish & Wildlife* seeks to educate sportsmen and women, conservationists, wildlife recreationists and all Hoosiers on topics related to the management of Indiana's fish and wildlife resources.

**Larry D. Macklin**

Department of Natural Resources  
Director

**Gary Doxtater**

Division of Fish and Wildlife Director

**Jon Marshall**

Public Affairs Chief

**Michael Ellis**, Editor

**John Maxwell**, Photographer

Focus on Fish & Wildlife is distributed free of charge. To subscribe, send name, complete address, city, state and zip code. Send address changes or subscription requests to:

*Focus on Fish and Wildlife*  
402 W. Washington St., Room W273  
Indianapolis, IN 46204

If you have questions, please write to the above address or call (317) 232-4080.

Visit the DNR  
Division of Fish & Wildlife website:  
[wildlife.IN.gov](http://wildlife.IN.gov)



focus on

# ***Taking your kids waterfowl hunting***

***When you're in a bind, take your kids to the blind***

I was stuck. "You're watching the kids tomorrow," my wife said after I told her I wanted to hunt geese in the morning. I had again made grand plans without consulting the master family calendar.

There was no way out of my paternal responsibility. So, I made the logical-man decision and decided to drag my 5- and 7-year-old boys along on an early-season September Canada goose hunt.

A hunting buddy, James, and I had found a partially harvested corn field with honkers galore, and since the early goose season lasts only a couple of fleeting weeks, I wanted to get out while the getting was good.

Poor planning is the mother of modern invention. I had never considered taking my kids waterfowl hunting. But out of desperation, I learned kids and waterfowl hunting go together.

You don't have to be quiet and still while hunting waterfowl. Noise making is even encouraged at times. Kids with goose calls are naturally good at sounding like geese. You

don't have to worry about ducks and geese catching wind of you. You can hunt on dry land and don't have to hike long distances or plow through heavy cover to waterfowl hunt.

On hunt morning, Graham and Scott jumped out of bed about 4:30 a.m., threw on layers of camouflage clothes laid out the night before, mixed up thermoses of hot chocolate and sprinted to the car — ready for a doughnut stop.

We set up our blind in standing corn. James and I sat one corn row in. The kids made a nest in the next row behind us. They munched doughnuts and periodically honked on the goose calls. Champion waterfowl callers may want to consider the benefits of blowing doughnut chunks through a call. I think it sounded better.

While we listened for geese, the boys ran around through the corn and blasted their calls. Occasionally, when we heard a distant honk, we would ask them to keep the noise down. Before long, they settled down in their nests. Graham fell asleep and



Scott peered through the corn tops, staying alert for signs of geese.

We heard the frenzied honking of a dozen geese taking off from a pond about half a mile away. With our decoys out in front of us, we started calling, pleading to the flock to fly our way. Behind us, Scott pulled his camo mask over his face and Graham went on snoozing.

Jim and I each picked a bird and drew a bead on it as the flock approached. It was clear they weren't going to land in our decoys, but they were going to fly low overhead. We fired almost simultaneously. Suddenly, I heard a sound behind me that rivaled my excitement when the birds flew over.

"Wooo, hooo! Way to go, Daddy!"

Graham woke up with the shot and exploded with excitement. Both boys leapt into action, running through the corn to find the downed bird.

Since that morning, my sons and I have gone waterfowl hunting together a number of times and each experience has been memorable. Along with a couple of other goose-hunting dads, I've experienced both the fun and the frustrations of having as many as five kids in the blind.

Early Canada goose and teal seasons are approaching. Since the weather is relatively warm during these seasons, it's a great time to get kids out into a blind. Indiana also has youth waterfowl hunting dates set aside exclusively for young hunters.



Don Mulligan, Graham Marshall and Emily Mulligan call to a passing flock of geese while hunting at Atterbury Fish and Wildlife Area. Early Canada goose season typically runs Sept. 1-15.

**Jon Marshall**, public affairs chief, Division of Fish and Wildlife



focus on

# *Sport license dollars - working for you*

## *Today's harvest from past visionaries*

History is a reminder, our diary, a benchmark, that we can check to see how things have changed.

Recently, I read a book about the history of Boone County in 1830. One description indicated this area was an *"unbroken wilderness with abundant game such as deer, turkey, wolves, wildcats, and there was said to be some bear and panthers, though I never saw any of the last two named."* Over time, our Hoosier wilderness changed, and so did the wildlife populations.

One hundred years later, Indiana had transformed from a wilderness to an agricultural state. The abundance of fish and wildlife that people remembered was scarce or rapidly vanishing. Economic depression and drought had created heavy burdens on families, communities and the country. Times weren't easy for people or wildlife. The money and skills to reverse this downward biological trend were scarce too, but people decided to do something about it.

It wasn't a good time to consider new taxes to launch a new fish and wildlife restoration program, but it happened, and one of the most

successful of all government user fee based programs began. Born out of hard times, two conservation programs — the Pittman-Robertson Wildlife Restoration Program (1937) and Dingell-Johnson Sport Fish Restoration Program (1950) — breathed life into a cooperative federal-state program to restore fish and wildlife habitats and populations throughout the country. This unique funding plan included an excise tax, and when combined with fishing and hunting license dollars, funded the conservation programs.

All federal tax money would come from the purchase of new fishing tackle, firearms, ammunition, and archery equipment.

Seven decades later, the growth, wisdom, and success of this remarkable program has not only benefitted users, but those who have never purchased fishing or hunting equipment or licenses.

This modest beginning has fostered a vision for conservation in this country for more than half a century. Often, this work is done in the silent woods, fields and waters around you, or in research laboratories far from

headline stories.

Hunting and fishing is big business in Indiana. Anglers and hunters spend about \$2 billion a year in Indiana. These trip related expenses generate millions of dollars every year to local economies. Only the special tax money placed on fishing and hunting equipment is earmarked for fish and wildlife restoration programs. The other tax funds related to fishing and hunting trips go to Indiana's general tax fund for many other different types of State programs. Today, the sale of fishing and hunting licenses and the special taxes for equipment, including ammunition and motor boat fuel, provide most of the funding used for management of fish and wildlife resources in Indiana.

Thanks to the conservation movement in this country, and the social and monetary support for fish and wildlife restoration programs, millions of people can still enjoy the heritage and experiences that attracted settlers to Indiana nearly two hundred years ago.

---

Randy Lang, staff specialist, Division of Fish and Wildlife



Wildlife restoration programs and projects include: expanding hunting, fishing and trapping opportunities on public and private land; studies, research and management to evaluate the abundance and distribution of wildlife.

Sport fish restoration programs and projects include: fisheries surveys to determine the abundance and distribution of fish; expanding fishing opportunities; research to improve fish populations; boat ramps and public access sites.

## focus on *Amanda's first deer*

### *Her determination and patience pays off*

On a cool December morning, Amanda Wolsiefer got up at 5 a.m. with a decision to make. Some young girls might make a decision to listen to a Britney Spears or 'N Sync CD, but not Amanda. She wanted to go either duck or deer hunting with her dad. It didn't take her long to decide that she wanted to go deer hunting.

She had never gone deer hunting before, but she had completed the required hunter safety course. Amanda and her dad, Kim, had been practicing deer hunting techniques for some time.

They stopped and got some doughnuts and milk for breakfast, and headed out for Jenny's, a good friend who had given them permission to hunt on her property. It was still dark when they arrived.

Amanda and her father got their gear together and began their journey. "We climbed over fences and walked through wet leaves and tiny trees," said Amanda. After 15 minutes, they reached the spot where her dad had previously put up two tree stands. He let Amanda go first, just in case she needed help - she didn't.

They got themselves comfortably situated, their safety belts were on and black-powder rifle loaded, with the safety on, of course. Amanda was getting hungry and ate her breakfast. After eating, she leaned back against the tree trunk and began to notice the character of the morning. There was a refreshing cool softness to the moist, morning air. It was also getting lighter.

After sitting for 40 minutes, her dad noticed a big buck headed in their direction, followed closely by a smaller buck. The first buck had a huge rack, like the one her dad had taken on a previous hunting trip.

Amanda got her muzzleloader ready. Her father helped her steady it. As she tried to find the deer in the

scope, both deer began to move away. The big buck bolted off, and the smaller one ran to her side of the tree, but it didn't stop long enough for her to find it in the scope.

Amanda really wanted her first deer, but she was getting sleepy. For safety, they decided to move to the ground. They located another spot on the side of a hill, facing into the woods. Amanda noticed how their view had changed. Up in the tree stand things had looked a lot clearer. On the ground the view seemed to blend together.

It wasn't long before they heard some small twigs break and leaves crackle. They spotted a doe about 150 yards away. Amanda got her gun ready and took the safety off. Her father helped her steady the muzzleloader.

She located the doe in her scope, but it didn't stand still. The doe was also facing her — not a good shot. Amanda waited, and her shot line improved, but only slightly. She whispered to her dad, "Do I shoot now?" and just to remind herself, "Where do I shoot it?" Her dad gently shook his head no.

The minutes were passing and her arms were very tired from holding up the weight of the muzzleloader. Many young hunters might have been exhausted and impatient by this time and would have given up.

The doe moved to about 50 yards away, turned sideways and stopped. She quietly whispered to her father, "Now?" He whispered back, "Yes".

Amanda squeezed the trigger. She had fired the muzzleloader before, but this time the kick and the noise startled her.

Amanda was excited, but was also aching. The stock had hit her chin when the muzzleloader recoiled.

They hurried over to investigate. She heard her dad say it was a "perfect place." He also told Amanda



First-time deer hunter Amanda Wolsiefer poses beside her deer. Amanda completed Indiana's required hunter safety course before going hunting.

how very proud he was of her.

Amanda had taken her first deer. Now, all they had to do was field dress it, and take it back to their truck. Amanda said, "Of course my dad was going to do both these things, because I didn't know how to field dress a deer yet, and I wasn't strong enough to drag it back to the truck."

Amanda helped her dad load it into the back of the truck, and they drove to the deer check station.

Amanda's story doesn't end here. As you can imagine, her dad was very happy and proud. After they finished at the check station, Amanda's dad drove over to see a good friend whose daughter had taken a deer two years earlier. After they talked and traded stories for almost an hour, they left for home to show her mom and brother. But they weren't home yet. Amanda and her father decided to get the deer out of the truck and take some pictures.

Not only do they have photos to look at, they also have a lifetime of memories to share.

Michael Ellis, program director, Division of Fish and Wildlife

# focus on *Exotic fish in Indiana's lakes and streams*

## *Just when you thought it was safe to go into the water*

### A quick exotic fish quiz

Fisheries biologists have confirmed fish catches in Indiana of:

- A. Piranha
- B. Arawana
- C. Shark

Surprisingly, the answer is all of the above.

A piranha was caught in Flint Lake in Porter county. The 20-inch arawana was caught in Lake George in Steuben county, and a small shark was found in Lake Monroe in Monroe County a number of years ago. Where are these exotic fish coming from and what effects might they have on our native fish?

### Piranha and arawana

When you think of a piranha, you probably envision a large, vicious fish with razor-like teeth, attacking and stripping an animal of its flesh right down to the bone.

But what if you were in South America, and came face-to-face with a piranha while swimming in a stream. More than likely the piranha would just look at you and swim away. Not what you would expect, but that's been the experience of scientists who have waded, swam and snorkeled in the waters where the piranha live.

Let's face it, the movies have created a bad impression of the piranha. The truth is, piranha prefer to eat small fish, shrimp, tiny crustaceans, insects, the flesh of dead animals, fruit, and pieces of plants.

The Chinese refer to the arawana as the dragon fish because its slender body and distinct, reflective scales, resemble a small dragon.

The dragon is a representation of good luck, wealth and power in Chinese culture because dragons are said to ward off evil and bring good luck.

In the wild, arawana live in shallow, slow moving water near the

surface. It's considered aggressive and is very defensive about its habitat.

### Terror in the deep

Large toothy-fish scare people. Last year, the DNR received reports of small schools of strange-looking fish and rod-and-reel catches of piranha from several farm ponds, and in a northern lake. It is highly unlikely that these fish are in a large enough school so that you end up with the kind of dramatic results you see on a "When Exotic Fish Attack" special. Still, people are afraid to send their pets or children into the water after one of these fish has been caught.

Exotic fish scare biologists too, but for different reasons. Even if the fish don't survive longer than a summer, that's long enough to introduce foreign diseases or other hitch-hiking species into the water. Most species introduced to a new environment usually are not adapted to local conditions and may not survive for long. The ones that do survive may reproduce rapidly because they have no natural predators or diseases in the new habitat. Exotic fish can compete with native fish for food, carry new diseases or parasites,

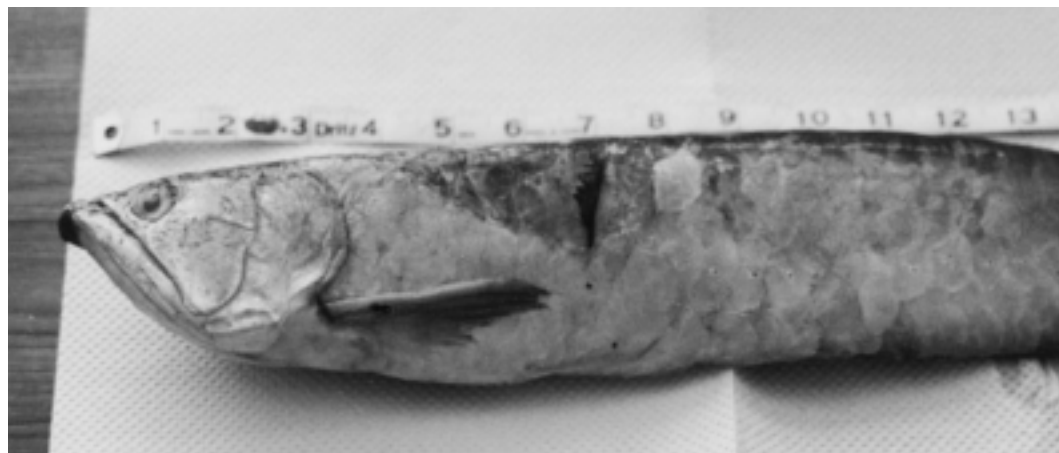
defend territories and exclude native fish from resources needed to breed or raise young, hybridize with related native species, and alter water quality by stirring the bottom or removing plants.

### How can exotic fish survive in Hoosier waters?

We assume that many of the tropical fish won't survive our winters. Even if a single individual survives, it would need others of its kind to reproduce. Many tropical species like Tilapia (cichlids) die in water temperatures below 50 degrees. However, evidence suggests that as generations of fish and plants are kept in aquaria, some of them can become more adapted to the conditions of northern waters.

Strains of various tropical species are being developed for aquaculture so that they will survive lower temperatures or saltier water. Species that normally wouldn't survive in colder waters have become domesticated and have a better chance of survival.

Indiana has more than 40 species of introduced fish. Established exotic fish in Florida number more than 120



Arawana can be found in central and northern South America in the Amazon drainage of Peru and Brazil. They live in marginal lagoons and small tributaries of large rivers during the dry season. They move to flooded backwaters

during the high-water season purchased in the fish market weigh almost 10 pounds.



species. Nationwide, about one in four new species originates from the aquarium trade.

### The problem is getting worse

Several decades ago, the only fish available were the few species carried by the local dime store, usually goldfish or guppies. With global commerce and the internet, it's now possible to order a fish and have it shipped to you from anywhere in the world. Fish shipped for aquarium purposes are exempt from state importation laws, so the DNR has no way of tracking which species are coming into Indiana and which ones might be problematic if released into the wild.

### Aquaria history

Keeping aquaria in homes is a relatively recent venture. The earliest keepers of captive fish were the Sumerians, who kept fish in artificial ponds more than 4,500 years ago. The circus entrepreneur P.T. Barnum opened the first display aquarium on this continent in 1856 at the American Museum in New York City.

### Be a responsible pet owner

There's nothing wrong with keeping a big tropical fish, as long as you know what you're getting into.

However, if you can't trade or give

a small fish that has grown too large to another responsible pet owner, or dispose of it properly, don't buy it. Many exotic fish start out very small — the size of a quarter — in the pet store, but can get as big as a dinner plate within a year or two.

Fish that require extra care and grow to large sizes are: pacu, piranha, arawana and some tropical catfish.

While the scientific names of fish don't change, the common names by which a fish is sold may vary. There are at least 15 species of piranha (genus *Serrasalmus*) sold in aquarium stores. Do some research on the species you are thinking of buying or buy the fish from a store where the sales people can tell you how large it will get and what you will need to properly care for it.

### You are the best defense

Controlling exotic species once they become established in a new area is difficult, if not impossible.

The most cost-effective, and often the only defense against introduced species is prevention. While laws can be passed that affect ownership or release of species, they can be difficult to enforce. We rely mostly on the ethics of dealers and aquarium owners to properly care for these exotics to keep our native fish and wildlife populations safe and healthy. It is up to the aquarium owner and dealers to be the first line of defense.

Gwen White, fisheries program specialist, Division of Fish and Wildlife

#### If you catch an unusual fish:

- measure its length
- take a close-up photograph
- preserve it by freezing
- report it to a district fisheries biologist. Available at: [fishing.IN.gov](http://fishing.IN.gov)

By tracking exotic fish, we may be able to identify potential problems before they develop.

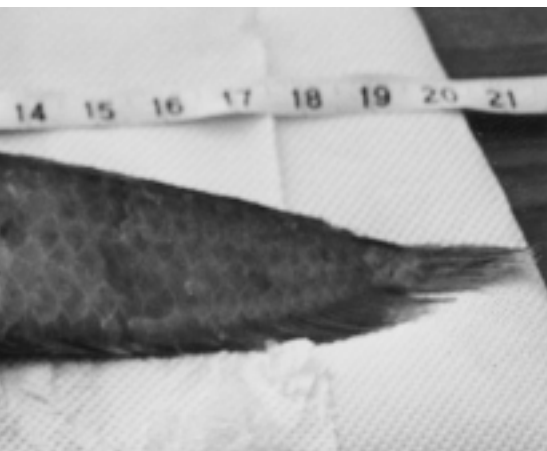
### Can I keep native fish in an aquarium or in my backyard pond?

As long as they are caught legally, according to gear restrictions and proper sizes and numbers, native fish can be kept in an aquarium or taken home to an isolated backyard pond. Anglers sometimes think it would help the wild population to grow these fish out and release them into a local river or lake.

Moving fish from one water body to another is stocking fish. This includes fish taken from your aquarium, backyard pond, and live fish from your bait bucket. It is illegal to stock fish without a permit.

Most native fish don't need a boost from stocking. Fish like bass, bluegill, and catfish will generally reproduce and thrive in areas where the water quality and habitat are available to sustain them. Fisheries biologists carefully survey lakes and rivers before determining where stocking might help.

Moving fish around can cause serious problems for the resident fish. The difficulty with detecting and tracking fish diseases makes it hard to predict the impacts of transferring sick fish. Fish may be carrying diseases or parasites without looking or acting sick. Bacteria, viruses, parasites, and the microscopic young of other species may be contained in the water that you dump along with the fish. A largemouth bass virus, previously thought to be only in southern lakes and rivers, was recently discovered in Lake George along the Indiana-Michigan border and may be in other lakes or rivers. The impacts of this new disease are not completely understood, but it has been implicated in fish kills in southern states.



h. Arawana are netted commercially for food and can be s of Brazil. The arawana grow to 2 feet in length and

focus on

# *Those genes sure look good - on fish*

## *The science of population genetics is complex*

"That looks like a fishy spot over there," you mutter to yourself as you ease the boat to within casting distance. A deft flick of the wrist casts your lure straight into the center of a small hole in the lily pads. The lure lies motionless for a few seconds — the ripples fade and the water returns to a glass-like smoothness. Then, a twitch, another twitch, a dark shadow appears, the water erupts and the fish explodes skyward like a missile. The battle begins. It's intense, but brief.

You're not at all surprised by the strain put on your arm as you lift the fish from the water. Your catch, a

largemouth bass and a real "wall hanger" to boot — seven pounds and change, according to the scales. You pause to admire your catch — dark olive green back fading to cream on the belly, lateral line stripe as black as midnight, body like a football, and mouth like a small cave. You smile, bend down, and then gently release the big bass back into the cool water.

This scene is replayed hundreds of times annually on Indiana's public waters, thanks in part to Indiana's state fish hatcheries. Since 1970, more than 3 million largemouth bass, ranging in size from 1.5-inch short fingerlings to 16-inch adults, have been stocked into Indiana's waters.

Adult largemouth bass are maintained at Driftwood State Fish Hatchery in southeastern Indiana to provide bass fingerlings for management programs directed by fisheries biologists. Although, the brood stock is considered "captive," the fish are not domesticated. They are not maintained in a controlled environment and must compete for available forage while avoiding predation.

Maintaining a captive brood population provides us with more reliable fry production than collecting brood fish from the wild. However, maintaining captive brood stocks also has some pitfalls. Due to limited hatchery space, our captive brood populations are small, compared to wild populations.

Small breeding populations tend to increase inbreeding — the mating of closely related genetic relatives — either randomly or intentionally. In and of itself, inbreeding is neither good nor bad. Kentucky Derby winners and American

Field Trial champions are often the product of mating an individual with desirable qualities to its descendants in order to retain and enhance those qualities. Inbreeding is also used to generate true-breeding lines, which are hybridized to produce crops, such as corn and wheat, with increased yield or disease resistance. But, inbreeding can have a down side. The closer the genetic relationship, the greater the percentage of abnormal offspring.

Indiana's largemouth bass captive brood stock program was developed to minimize the detrimental effects of inbreeding and maintain the genetic diversity for stocking in public waters. Founder stock was selected from multiple lakes from the north, south, and central regions of the state. Testing on the brood fish from each region was done to determine if multiple brood stocks were needed. At least 300 adults are spawned annually to yield an estimated inbreeding rate of only 0.17 percent per generation, well below the threshold of concern recommended by leading geneticists. The brood fish spawn without human assistance in ponds, so pairings don't select for particular characteristics.

The broodstock for the next generation are selected from a pool of all fry produced that year to minimize siblings in the future brood populations. Brood stock are evaluated at 15 year intervals to determine when the small population is beginning to affect diversity and new genetic material is needed.

Efforts by our fishery biologists continue to provide top quality largemouth bass for fish management programs. The science of population genetics is complex, but essential to the management of Indiana's natural resources.



Paul Ehret from Carmel, Ind. with his catch from Turtle Creek Reservoir. Indiana's largemouth bass brood stock are managed to maximize genetic diversity and minimize inbreeding.

Jim Luttrell, Driftwood Fish Hatchery manager, Division of Fish and Wildlife



focus on

# *Indiana is all wet, and that's a good thing*

## *Helping restore Indiana's wetland heritage*

This year is the 10<sup>th</sup> anniversary of American Wetlands Month. Each summer, numerous groups and thousands of individuals join together to celebrate the uniqueness, beauty, and importance of wetlands.

A wetland can be as tiny as a small wet spot or puddle or as large as the Florida Everglades, and they are found in every state in the nation.

To help restore their wetlands, many Hoosier landowners turn to the Natural Resources Conservation Service's Wetlands Reserve Program (WRP). WRP provides financial and technical resources to landowners to restore wetlands on private lands.

Since 1994, WRP in Indiana has restored more than 25,000 acres of wetland habitat. In addition to restoration, WRP provides financial support to agricultural producers by purchasing wetland easements on high-risk, high-cost agricultural lands that frequently flood.

Indiana has one of the nation's largest WRP easements on a 7,068-acre site in Greene County. The landowner of the Wilder Wetlands Restoration, in areas known as Goose Pond and Beehunters Marsh, turned to WRP because of increasing



More than one-third of the United States' threatened and endangered species live only in wetlands, and nearly half use wetlands at some point in their lives. Many species of birds and mammals rely on wetlands for food, water, and shelter, especially during migration and breeding.

difficulties raising crops in wet soil conditions. The restored site will provide a significant resting and nesting site for a variety of migratory waterfowl, shorebirds, and other wetland dependent species.

For more information about wildlife habitat cost share programs contact your district wildlife biologist. Available at: [wildlife.IN.gov](http://wildlife.IN.gov)

Michael Ellis, program director, Division of Fish and Wildlife



Wetlands are a valuable natural resource. Wetlands help regulate water levels within watersheds; improve water quality; reduce flood and storm damages; provide important fish and wildlife habitat; and support hunting, fishing, and other recreational activities.

### **Major Indiana WRP wetland sites include:**

- **Kankakee Sands**  
2,780 acres in Newton County are currently under a 30-year easement in WRP where warm season grasses and native plants will restore vegetation.
- **Muscatatuck River Basin**  
1,300 acres of marginal cropland are being restored as wetlands.
- **Cane Ridge Wildlife Management Area Project**  
A unique partnership cooperating to move and improve the local nesting habitat for the federally endangered interior least tern and to restore 463 acres of bottomland forest wetland from cropland.

focus on

# *Ginseng - is it really lightning in a bottle?*

## *The joys and frustrations of hunting ginseng*

Ginseng is considered by many to be lighting in a bottle, a silver bullet, the genie in a lamp, the holy grail of plants. It's an amazing plant, but most people probably wouldn't recognize it if they stumbled over it. But for ginseng hunters, what a plant to stumble over.

Ginseng grows in most of Indiana, and in several surrounding states. I've found it in small patches, and as a lonely old solitary plant. Shady hardwood forests, with moist, rich, well-drained soil are the places it prefers to grow.

### **My introduction to ginseng**

The first time I went ginseng hunting was with my step-dad, Eddie. It was a hot autumn day. The sky was the color of the old faded jeans I was wearing.

Around noon we stepped off of the narrow deer trail we had been following and sat in the shade of a big old maple tree. We ate the two apples and hard cheese he had packed for lunch and washed it all down with a canteen of warm water.

After lunch, I asked him why we were looking for ginseng. He smiled and said, "It's all about balance. You'll find that people look for lots of things in life: money, health, good looks, a big home. But folks often fail to appreciate the little things in their lives. Ginseng is one of those little things."

He pulled out one of the ginseng roots we had dug up earlier and said, "Any plant that looks like a human figure or a human body part, is called a sign or signature plant. It's thought of by some

cultures as a divine sign letting you know it was good for helping the body part it resembled.

Hepatica leaves are lobed-shaped like the liver, so some people believe it's good to treat liver ailments. Since the root of the ginseng plant looks amazingly like the human body, with arms and legs, it's a sign that it was good for the whole body."

### **A brief history of ginseng**

The legend and lore of ginseng goes far back in history. Chinese traditions are deeply involved in the concept of Yin and Yang, representing the balance of the universe. To help prevent or to cure some disease, this same balance was necessary in the body. They relied on ginseng root to restore and maintain that balance.

#### **Growing ginseng**

Today, many "sangers" grow their own ginseng. Those who have been successful will usually share with you what works for them. But don't ask them where they find their ginseng. They would sooner tell you where they find morel mushrooms in the spring, than to reveal their ginseng locations.

Try these tips for growing you own ginseng. The location should have no more than 70 percent shade throughout the day. Ginseng plants need about four hours of sunlight, preferably morning light. If you see the ground is covered by a lot of vegetation, there is too much sunlight. If you see little ground cover, there is not enough sunlight. The soil pH should be between 5.5 to 6.5, but some growers feel that pH between 5.5 and 6.0 is ideal.

You can buy ginseng seed to plant. The general recommended application of seed is forty pounds per acre. Some growers also use a broadcast of bone meal, potassium and nitrogen as a soil supplement.



Harvest season is from Sept. 1 to Dec. 31. Planting ginseng seeds near where the root has been dug rather than scattering them on the surface, will greatly increase the chance of new plants replacing those you harvest. Contact a dealer for advice on digging and drying ginseng. The best way to find a dealer is to check with the fur buyers in your area.

A few growers drive metal surveyor rods in the ground, about 12 feet apart, to help attract static electricity, which they say promotes more growth.

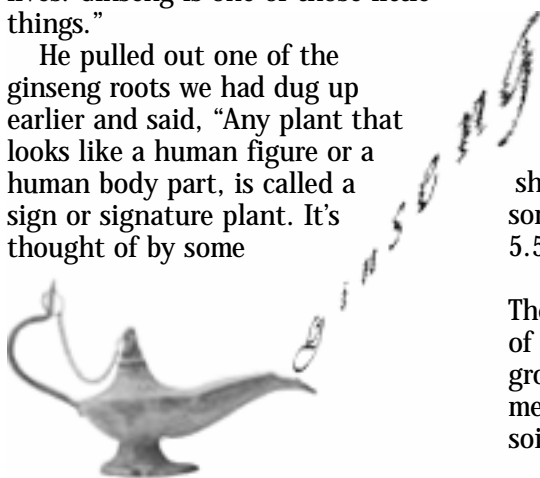
Collection of ginseng has been so intense over the years that it has become much harder to find. To help ginseng make a comeback, and still provide outdoor enthusiasts a recreational and financial benefit, Indiana has enacted a program for harvesting and selling ginseng. The purpose of Indiana's ginseng program is to ensure a healthy population for the future — it's about balance.

Harvesting is not allowed on state property. Just like fishing, hunting, or trapping, you need to obtain landowner permission before digging ginseng on private property.

Michael Ellis, program director, Division of Fish and Wildlife

For administrative questions about ginseng contact: Division of Nature Preserves  
317-232-4052 • fax 317-233-0133

For law and enforcement questions about ginseng contact: Law Enforcement Division  
317-232-4010 • fax 317-232-8035



# focus on ***DNR programs at the 2001 Indiana State Fair***

See snakes, bobcats, bird dogs and falcons at this year's DNR Backyard Theater. The theater is located behind the State Fair DNR building. The programs showcase Indiana fish, wildlife and recreation resources.

## **DNR BACKYARD THEATER SCHEDULE**

### **Wednesday, Aug. 8**

- 6 p.m. The fox show, Jim and Nancy Mahoney
- 7 p.m. Resource protection dogs, Indiana Conservation Officers

### **Thursday, Aug. 9**

- 6 p.m. Animal tracks for kids, Fort Harrison State Park interpreters
- 7 p.m. Owls of Indiana, Hardy Lake interpreters

### **Friday, Aug. 10**

- 5 p.m. Bobcats of Indiana, Darrel Smith and Kathy Quimbach
- 6 p.m. Bobcats of Indiana II

### **Saturday, Aug. 11**

- 11 a.m. Taste of the wild cookout - Indiana's wild fish & game

- 9 a.m. Hoosier Muskie Hunters forum, to with seminars throughout
- 9 p.m. the day

### **Sunday, Aug. 12**

- 1 p.m. Smokey Bear party, Lieber State Recreation Area staff
- 11 a.m. Taxidermy demonstrations and Hoosier Trapper Supply
- 2 p.m.

### **Monday, Aug. 13**

- 5 p.m. Bird dog demonstration, Scott Pet Products
- 6 p.m. Fly casting and fly tying, Fly Masters of Indianapolis

### **Tuesday, Aug. 14**

- 5 p.m. Trapping nuisance wildlife A Best Wildlife Removal
- 6 p.m. Turtle fun for everyone, Patoka Lake interpreters

### **Wednesday, Aug. 15**

- 5 p.m. Frog music, Mounds S.P. interpereters
- 6 p.m. The art of falconry, Indiana Falconry Association

### **Thursday, Aug. 16**

- 3 p.m. Butterfly gardening, DNR Division of Entomology (Butterfly garden at the southwest corner of the Natural Resources Bldg.)
- 6 p.m. Fly fishing demonstration, The Royal River Company

### **Friday, Aug. 17**

- 7 p.m. Snakes Alive!, Hardy Lake interpreters

### **Saturday, Aug. 18**

- 9 a.m. Hoosier Muskie Hunters forum, Muskie seminars
- 9 p.m. throughout the day

## ***2001-02 Hoosier Outdoor Calendar***

### ***Full-color calendar features***

Fishing hot spots, Indiana season dates,  
full-color wildlife paintings, nature facts  
... and much more!

### **2001-02 Hoosier Outdoor Calendar**

Please send me \_\_\_\_\_ calendars. Enclosed is a check/money order/credit card for \$ \_\_\_\_\_ (\$8 per calendar)

VISA \_\_\_\_\_ MASTERCARD \_\_\_\_\_ Exp. date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Credit card # \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Send form with a check, money order or credit card information to:  
**DNR Calendar Sales**, 402 W. Washington St., Room W-160,  
Indianapolis, IN 46204



### **Calendar dates run from Sept. 2001 to Aug. 2002**

Calendars are available August 1, for \$8 each. Allow 3 to 4 weeks for delivery.

Proceeds from the calendar go to Indiana's Fish and Wildlife Fund, which is used to protect and manage fish and wildlife resources in Indiana.



FREE SERVICE!

# Wild bulletin



**Find out** where the fish are biting, how to spot rare wild birds, and how this year's hunting season is shaping up – all through **Wild Bulletin**, a **FREE** e-mail information service offered by the DNR Division of Fish and Wildlife.

**Wild Bulletin** provides frequent **updates** about Indiana's natural resources and recreation through e-mail. Sign on to receive **information** about hunting and fishing season dates, regulation updates, wildlife and fisheries research status reports, **tips** on wildlife watching and reminders about **IMPORTANT DATES** for Hoosier outdoor enthusiasts. You'll also get updates about new information available on the DNR web page.

To subscribe to **Wild Bulletin**, send an e-mail to: [major\\_domo@ai.org](mailto:major_domo@ai.org) with the message body: **subscribe wildbulletin** <your e-mail address> Leave the subject of the message blank.

To subscribe to **Wild Bulletin** on the DNR web site, go to:  
[wildlife.IN.gov](http://wildlife.IN.gov)

PRSR STD  
U.S. POSTAGE  
PAID  
INDIANAPOLIS, IN  
PERMIT #7429

Address Service Requested

Division of Fish and Wildlife  
402 W. Washington St., Room W273  
Indianapolis, IN 46204  
317/232-4080  
INDIANA DIVISION OF  
FISH & WILDLIFE

